

## AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method ~~in a signaling network node having a prescribed point code, the method~~ comprising:

detecting, by a signaling network node having a prescribed point code, a prescribed condition for at least an affected signaling node associated with a corresponding affected point code;

generating by the signaling network node a route management signaling message in response to the prescribed condition, by:

(1) first inserting the prescribed point code into an originating point code field, a destination point code for a corresponding destination signaling node into a destination point code field, and the affected point code into a third point code field,

(2) selecting a signaling link selection value based on the affected point code, and

(3) second inserting the signaling link selection value into a prescribed signaling link selection field in the route management signaling message; and

outputting by the signaling network node the route management signaling message onto a signaling network for delivery to the destination signaling node via a path selected based on the signaling link selection value.

2. (ORIGINAL) The method of claim 1, wherein the generating step includes generating the route management signaling message as an SS7 Message Transfer Part 3 (MTP3) route management message.

3. (ORIGINAL) The method of claim 2, wherein the selecting step includes:  
determining whether the affected point code identifies a cluster that includes the affected signaling code; and

selecting a first portion of the affected point code that distinguishes the prescribed cluster from other clusters for generation of the signaling link selection value, if the affected point code

identifies the cluster relative to the other clusters.

4. (ORIGINAL) The method of claim 3, wherein the step of selecting a signaling link selection value further includes selecting a second portion of the affected point code, distinct from the first portion, if the affected point code does not identify a cluster.

5. (ORIGINAL) The method of claim 4, wherein the step of selecting a second portion includes identifying the second portion to be selected based on a configuration register set by a user.

6. (ORIGINAL) The method of claim 4, wherein the step of selecting a second portion includes using a prescribed number of least significant bits from the affected point code as the second portion.

7. (ORIGINAL) The method of claim 3, wherein the step of selecting the first portion includes selecting a cluster number from the affected point code.

8. (ORIGINAL) The method of claim 2, wherein the selecting step includes mapping the affected point code to the signaling link selection value using a prescribed mapping function.

9. (ORIGINAL) The method of claim 2, wherein the outputting step includes identifying an available outbound link based on accessing a signaling link selection - outbound link table configured for identifying, for each available signaling link selection value, an assigned available outbound link.

10. (ORIGINAL) A signaling network node having a prescribed point code and further comprising:

means for detecting a prescribed condition for at least an affected signaling node

associated with a corresponding affected point code;

means for generating a route management signaling message in response to the prescribed condition, by:

(1) first inserting the prescribed point code into an originating point code field, a destination point code for a corresponding destination signaling node into a destination point code field, and the affected point code into a third point code field,

(2) selecting a signaling link selection value based on the affected point code, and

(3) second inserting the signaling link selection value into a prescribed signaling link selection field in the route management signaling message; and

means for outputting the route management signaling message onto a signaling network for delivery to the destination signaling node via a path selected based on the signaling link selection value.

11. (ORIGINAL) The node of claim 10, wherein the generating means is configured for generating the route management signaling message as an SS7 Message Transfer Part 3 (MTP3) route management message.

12. (CURRENTLY AMENDED) The node of claim 11, wherein the ~~selecting~~ generating means is configured for:

determining whether the affected point code identifies a cluster that includes the affected signaling code; and

selecting a first portion of the affected point code that distinguishes the prescribed cluster from other clusters for generation of the signaling link selection value, if the affected point code identifies the cluster relative to the other clusters.

13. (CURRENTLY AMENDED) The node of claim 12, wherein the ~~selecting~~ generating means is configured for selecting a second portion of the affected point code, distinct from the first portion, if the affected point code does not identify a cluster.

14. (CURRENTLY AMENDED) The node of claim 13, wherein the ~~selecting~~  
generating means is configured for identifying the second portion to be selected based on a  
configuration register set by a user.

15. (CURRENTLY AMENDED) The node of claim 13, wherein the ~~selecting~~  
generating means is configured for using a prescribed number of least significant bits from the  
affected point code as the second portion.

16. (CURRENTLY AMENDED) The node of claim 12, wherein the ~~selecting~~  
generating means is configured for selecting the first portion by selecting a cluster number from  
the affected point code.

17. (CURRENTLY AMENDED) The node of claim 11, wherein the ~~selecting~~  
generating means is configured for mapping the affected point code to the signaling link selection  
value using a prescribed mapping function.

18. (ORIGINAL) The node of claim 11, wherein the outputting means includes a  
signaling link selection - outbound link table configured for identifying, for each available  
signaling link selection value, an assigned available outbound link, the outputting means  
configured for identifying an available outbound link based on accessing the signaling link  
selection - outbound link table.

19-27 (CANCELED).

28. (NEW) A signaling network node having a prescribed point code and further  
comprising:

a management resource configured for detecting a prescribed condition for at least an  
affected signaling node associated with a corresponding affected point code, the management

resource further configured for generating a route management signaling message in response to the prescribed condition, by:

(1) first inserting the prescribed point code into an originating point code field, a destination point code for a corresponding destination signaling node into a destination point code field, and the affected point code into a third point code field,

(2) selecting a signaling link selection value based on the affected point code, and

(3) second inserting the signaling link selection value into a prescribed signaling link selection field in the route management signaling message; and

a routing resource configured for outputting the route management signaling message onto a signaling network for delivery to the destination signaling node via a path selected based on the signaling link selection value.

29. (NEW) The node of claim 28, wherein the management resource is configured for generating the route management signaling message as an SS7 Message Transfer Part 3 (MTP3) route management message.

30. (NEW) The node of claim 29, wherein the management resource is configured for:  
determining whether the affected point code identifies a cluster that includes the affected signaling code; and

selecting a first portion of the affected point code that distinguishes the prescribed cluster from other clusters for generation of the signaling link selection value, if the affected point code identifies the cluster relative to the other clusters.

31. (NEW) The node of claim 30, wherein the management resource is configured for selecting a second portion of the affected point code, distinct from the first portion, if the affected point code does not identify a cluster.

32. (NEW) The node of claim 31, wherein the management resource is configured for

identifying the second portion to be selected based on a configuration register set by a user.

33. (NEW) The node of claim 31, wherein the management resource is configured for using a prescribed number of least significant bits from the affected point code as the second portion.

34. (NEW) The node of claim 30, wherein the management resource is configured for selecting the first portion by selecting a cluster number from the affected point code.

35. (NEW) The node of claim 29, wherein the management resource is configured for mapping the affected point code to the signaling link selection value using a prescribed mapping function.

36. (NEW) The node of claim 29, further comprising a signaling link selection - outbound link table configured for identifying, for each available signaling link selection value, an assigned available outbound link, the routing resource configured for identifying an available outbound link based on accessing the signaling link selection - outbound link table.